

The opinion in support of the decision being entered today was not written for publication and is not binding precedent of the Board.

Paper No. 26

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U.S. PATENT AND TRADEMARK OFFICE
BOARD OF PATENT APPEALS
AND INTERFERENCES

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE BOARD OF PATENT APPEALS
AND INTERFERENCES

Ex parte WILLIAM FRANCIS WEBER, MICHAEL JOSEPH WALRAVEN,
JARED CLARK, and DANIEL CORNELIUS BACH

Appeal No. 2004-2068
Application No. 09/385,739

ON BRIEF

Before BARRETT, RUGGIERO, and BLANKENSHIP, Administrative Patent Judges.
BLANKENSHIP, Administrative Patent Judge.

DECISION ON APPEAL

This is a decision on appeal under 35 U.S.C. § 134 from the examiner's final rejection of claims 1-18, which are all the claims in the application.

We affirm-in-part.

BACKGROUND

The invention is directed to a method of parametric design of an instrument panel support structure for an instrument panel in a vehicle. Claim 1 is reproduced below.

1. A method of parametric design of an instrument panel support structure for an instrument panel in a vehicle comprising the steps of:

selecting a vehicle body structure for the vehicle from a library stored in a memory of a computer system;

orienting an occupant within the vehicle body;

locating an instrument support structure relative to the vehicle body;

determining an input parameter, wherein the input parameter is a three dimensional coordinate defining the instrument panel support structure relative to the vehicle;

electronically generating a parametric design of the instrument panel support structure using the input parameter;

determining if the parametric design of the instrument panel support structure meets a predetermined criteria using a computer-aided analytical technique; and

modifying the input parameter if the parametric design of the instrument panel support structure does not meet the predetermined criteria.

The examiner relies on the following references:

| | | |
|------------------------------|-----------|---------------------------------------|
| Saxton et al. (Saxton) | 4,882,692 | Nov. 21, 1989 |
| Cavendish et al. (Cavendish) | 5,119,309 | Jun. 2, 1992 |
| Weber et al. (Weber) | 6,110,216 | Aug. 29, 2000 (filed Dec. 4, 1997) |

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Claims 1, 7, and 16 stand rejected under 35 U.S.C. § 102 as being anticipated by Weber.

Claims 1-18 stand rejected under 35 U.S.C. § 103 as being unpatentable over Cavendish and Saxton.

We refer to the Final Rejection (Paper No. 9) and the Examiner's Answer (Paper No. 20) for a statement of the examiner's position and to the Brief (Paper No. 17) and the Reply Brief (Paper No. 21) for appellants' position with respect to the claims which stand rejected.

OPINION

Weber describes, as set forth in the Abstract, a computer based system and method for designing an automotive vehicle which orients an electronic representation of an occupant with respect to a three-dimensional electronic representation of a portion of the vehicle. At least one vehicle system is also represented in electronic form with respect to a common reference point. The designer may vary the occupant orientation, the location of the vehicle system, or both, so that the design meets predetermined criteria. If a parameter change is made, the system automatically rebuilds every other effected dimension.

Weber is directed, in particular, to parametric design in the electronic construction of vehicle geometry for ergonomic studies, components, and assemblies. In the computer-implemented system and method, parameter selection and control can

be accomplished by a user 26 via a keyboard 28 (Fig. 1) or an input device such as a mouse. One input method includes a pop-up window with all current parameters, with an on-line description for the parameter and its current value. Col. 4, ll. 32-63.

After the occupant representation has been oriented in the vehicle, various systems, devices, or components are then "packaged" on the vehicle. "Packaged" means that an electronic representation of the dimensions of the system, device, or component are geometrically related to the vehicle three dimensional electronic reference frame or coordinate system. The vehicle "systems" include any part of the vehicle which will interact with the occupant, such as instrument panel clusters, HVAC control panels, steering wheel and column, and knee bolsters. Col. 5, ll. 32-57. When a change is made to the occupant orientation, a vehicle system, or any other design parameter -- such as a locational change with respect to the chosen coordinate system -- regeneration of the entire vehicle design is electronically performed. Col. 7, ll. 13-17.

Weber provides an example of selecting a vehicle platform which determines the three-dimensional coordinates of the platform in an electronic form as represented in the computer memory. An occupant is oriented in the vehicle, after which a seat, steering wheel and column are located. After the instrument panel cluster is located, associated instrument controls are packaged; i.e., the device, component, or system is selected and electronically represented in a location proximate other vehicle structure so as not to interfere with adjacent components or structure. Col. 7, l. 37 - col. 8, l. 30.

After the instrument panel components, devices, and systems have been packaged, various studies may be electronically performed to determine whether the package is satisfactory with respect to human factors (e.g., studies with respect to the reach zone). Should the packaging be unacceptable, vehicle design alteration may be made. Col. 8, ll. 31-61.

Later in the design process vehicle structure is added (box 80; Fig. 3), which includes a cross car beam 242 and support brackets 244 (Fig. 14), and may include additional structure such as knee bolsters. The minimum reach zone may be compared to predetermined minimum reach criteria, for aiding in the decision whether a design change is indicated. Col. 9, l. 35 - col. 10, l. 2.

With respect to instant claim 1, appellants argue that Weber lacks determining an input parameter, wherein the input parameter is a three dimensional coordinate defining an instrument panel support structure relative to a vehicle and electronically generating a parametric design of the instrument panel support structure using the input parameter. According to appellants, Weber locates an occupant and instrument panel cluster in the vehicle and electronically represents them, but the method does not determine an input parameter, where the input parameter is a three dimensional coordinate defining an instrument panel support structure relative to the vehicle. (Brief at 8-9.)

In the Answer, the examiner cites specific sections of Weber, including the portion at column 9 that discloses adding vehicle structure including a cross car beam

and support brackets. (Answer at 11-12.) Appellants, in reply, repeat the above-noted arguments from the Brief. Appellants address the examiner's citation of column 4, line 53 et seq., describing input methods for parameter selection and control, with the assertion that the section fails to show how "the input parameter is determined and that the input parameter is a three dimensional coordinate defining the instrument panel support structure relative to the vehicle." (Reply Brief at 2.)

In view of the similarities between the instant disclosure and Weber,¹ appellants' arguments are unhelpful in showing error in the examiner's finding of anticipation. Indeed, on this record it appears that Weber and the instant application share common inventors and a common assignee. Appellants should be in the best position to articulate exactly how the language of the instant claims is thought to distinguish over the prior art disclosure, but have merely quoted claim language and presented what amount to vague allegations of patentability.

We acknowledge that Weber does not contain the literal language of instant claim 1. However, anticipation is not an "ipsissimis verbis" test. In re Bond, 910 F.2d 831, 832, 15 USPQ2d 1566, 1567 (Fed. Cir. 1990). We do not see, and certainly appellants have not explained, how Weber may lack a parameter that is a three dimensional coordinate defining the instrument panel support structure (i.e., at least the cross car beam 242). Weber does not express how the vehicle components are

¹ We note, for example, the input method described in the instant specification at page 12 and the cross-car support beam described initially at pages 14 and 15.

“located” with respect to the three dimensional coordinate system. However, whether the coordinates are entered by the user, or determined automatically by the computer system when the component is initially placed in relation to the components previously placed in the electronic representation of the vehicle, instant claim 1 does not distinguish over either case. That is, the input parameter is “determined” by the placement of the component within the three dimensional coordinate system, regardless of the mechanism by which the component is placed.

For the foregoing reasons we sustain the § 102 rejection of claim 1 as being anticipated by Weber. Appellants rely on similar limitations in instant claim 7 in the arguments in defense of that claim. We also sustain the § 102 rejection of claim 7.

Appellants’ arguments with respect to claim 16 in view of Weber amount, again, to vague allegations of patentability. The arguments seem to center on the contention that Weber does not disclose selecting parameters and selecting a predetermined condition as claimed. We find no substantive difference between “determining” and “selecting” parameters, in the language of claims 1 and 7 as compared to that of claim 16. The method of Weber “determines” parameters for locating and attaching the instrument panel support structure in the placement and attachment of the electronic representation of the structure within the three-dimensional coordinate system. The “predetermined condition” as broadly claimed may refer to any of the design parameters relevant to the support structure in addition to those defining placement and attachment, as suggested by the examiner (Answer at 13-14). In any event, appellants’

arguments do nothing to persuade us of error in the examiner's finding of anticipation.

We sustain the § 102 rejection of claim 16.²

We do not, however, sustain the rejection of claims 1-18 under 35 U.S.C. § 103 as being unpatentable over Cavendish and Saxton, as the examiner has not set forth a prima facie case for obviousness. We agree in substance with appellants' response set out in the Reply Brief. In particular, Cavendish is directed to a method for creating composite surfaces that are useful in the design of automobile inner panels. We find no suggestion from the prior art for applying the teachings of Cavendish to the claimed methods that include, at the least, determining or selecting parameters defining an instrument panel support structure relative to a vehicle. Saxton does not remedy the basic deficiencies of the Cavendish reference as applied against the claims.

CONCLUSION

The rejection of claims 1, 7, and 16 under 35 U.S.C. § 102 as being anticipated by Weber is affirmed.

The rejection of claims 1-18 under 35 U.S.C. § 103 as being unpatentable over Cavendish and Saxton is reversed.

The examiner's decision in rejecting claims 1-18 is thus affirmed-in-part.

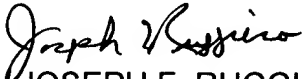
² Weber is the most pertinent reference applied against the claims in this appeal. It is unknown why the examiner did not apply the reference against any of the dependent claims, either alone (§ 102) or in combination with one or more additional references (§ 103). Upon return of the application to the examiner's jurisdiction, the examiner should reconsider prior art rejections that may be applied against dependent claims in view of Weber.

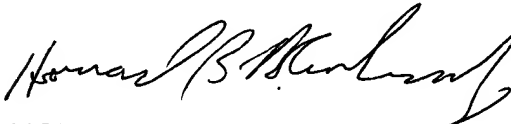
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No time period for taking any subsequent action in connection with this appeal
may be extended under 37 CFR § 1.136(a). See 37 CFR § 1.136(a)(1)(iv).

AFFIRMED-IN-PART


LEE E. BARRETT
Administrative Patent Judge


JOSEPH F. RUGGIERO
Administrative Patent Judge


HOWARD B. BLANKENSHIP
Administrative Patent Judge

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